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The appeal to the Christian tradition in the debate about embryonic stem cell research

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ABSTRACT *This paper focuses on an argument that has been invoked in the stem cell debate: appeal to the Christian tradition. Bishop Richard Harries has put forward the claim that the Christian tradition offers precedent that would give ethical justification for experimenting on human embryos. In contrast, Pope John Paul II has claimed that the tradition unwaveringly supported the protection of the human embryo from deliberate harm. In favour of Pope John Paul's reading of the Christian tradition is the fact that Christianity was notable from the outset for its wholehearted opposition to abortion. Bishop Harries can point to three elements in the tradition that seem to qualify the absolute prohibition on abortion: (1) variable penalties for abortion; (2) belief in delayed ensoulment; (3) abortion to save the mother's life. Nevertheless, detailed consideration of the tradition shows that these apparent qualifications do not provide precedent for destructive experiments on human embryos.*

The question of the ethics of embryonic stem cell research can be addressed in a variety of different ways. Arguments for and against stem cell research have appealed to embryology, philosophy, politics and economics. Among religious believers the arguments have also included issues of theology and the interpretation of sacred texts (whether the Torah, the Bible or the Qur'an). The present paper focuses on just one strand of argument that has been invoked in the stem cell debate: appeal to the Christian tradition. Bishop Richard Harries in the United Kingdom and Archbishop Carnley in Australia have both put forward the claim that the Christian tradition offers precedent that would give ethical justification for experimenting on human embryos. This contrasts sharply to claims made by Pope John Paul II and others that the tradition unwaveringly supported the protection of the human embryo from deliberate harm. The conflicting claims that have been made about the Christian tradition constitute only a minor skirmish in the larger battle over the ethics of embryo experimentation. Nevertheless, in an area where so much is disputed, this is one issue that seems relatively tractable. It should be simply a matter of measuring the various claims against the texts of the tradition.

Religion and the beginning of life

The involvement of religions in ethical issues at the beginning of life is sometimes resented by those who do not share a religious world view. Therefore, before turning to historical matters, it is worth asking why issues such as embryo experimentation and abortion should be of particular concern to religious people. What have these matters to do with religion?

The mystery of existence

Interest in the beginning of life, which is a feature common to many different traditions, seems to be related to the mystery of creation, the transition from non-existence to existence. For each person there was a time when he or she did not exist. The thought of one's own non-existence poses a problem. It is easy enough to imagine a scene where we are not present,

but from what perspective is this scene viewed? Who is viewing it? This seems to be a specific instance of a larger problem of thinking what is not, a philosophical problem which was already recognised by Parmenides (Anscombe 1981a, vii-xi). The difficulty is not simply reflexive, relating to one's own existence, it is similar if we think of someone else. Someone, who is the centre of his or her own story, his or her own world, once did not exist at all. If we consider seriously the beginning, and thus the very existence, of a particular human being, of ourselves or someone we know well, we realise that this "not being at all" and then "being" is something very strange and profound. Wittgenstein once said: "Not *how* the world is, but *that* the world is is the mystery" (Wittgenstein 1922, 6.44). In the same way each person can say - not how I am, but that I am at all, is the mystery - a mystery that is highlighted by the fact that I had a beginning. We exist, though we might easily not have existed, for once we were not.

Clearly the beginning of each human life, of necessity, raises religious and philosophical questions and not only questions in biology or medicine. The existence of a person is necessary to that person and yet the person once did not exist. Human existence is given from outside. In this mystery of each person's existence the believer will recognise the power of the Almighty: the Creator's gift of life and being to the creature.

It is for this reason that the prophets felt compelled to trace their call from God back to the time they were formed in the womb:

Before I formed you in the womb I knew you,
and before you were born I consecrated you;
I appointed you a prophet to the nations.
(Jeremiah 1:5)

And again:

The Lord called me before I was born,
while I was in my mother's womb he named me.
(Isaiah 49:1)

And that the psalmist wrote of God forming the human embryo in the womb:

13. For it was you who formed my inward parts;
you knit me together in my mother's womb...
16. Your eyes beheld my embryo [*golmi*].
In your book were written
all the days that were formed for me,
when none of them as yet existed.
(Psalm 139: 13-16).

Religious involvement in the debate

For this reason we should also expect believers to be engaged with those ethical issues that involve the coming to be of new life: contraception, abortion, the new reproductive technologies, and most recently embryo experimentation and embryonic stem cell research. And indeed, religious voices have been very prominent in the recent debates that have taken place in this country on the subject of embryo experimentation. The parliamentary committee which first examined these issues, the *Committee of Inquiry into Human Fertilisation and Embryology* was chaired by a secular philosopher, Mary Warnock. Nevertheless, religious voices were not absent from that debate. According to Warnock "when this issue was

eventually debated in Parliament, in the Bill of 1989/90 which began in the House of Lords, the most effective speaker to argue the developmental view was the then Archbishop of York, John Habgood” (Warnock 2001, 489). Other Christian voices were also apparent in the debateⁱ and their influence is evident in the minority report of the Warnock Committeeⁱⁱ.

In 1989, a committee set up to review the *Guidance on the Research Use of Fetuses and Fetal material* was chaired by an Anglican priest, John Polkinghorne (Polkinghorne 1989). Twelve years later the *House of Lords Select Committee on Stem Cell Research* was chaired by another Anglican clergyman Richard Harries, Bishop of Oxford. It received submissions from Christian, Jewish and Muslim organisations. Notable among these was a submission from the *Linacre Centre for Healthcare Ethics*, the Roman Catholic Bioethics Centre for the United Kingdom “on the place of the human embryo within the Christian tradition and on the theological principles for evaluating its moral status” (Jones 2001). This submission was significant in that it attracted support from a number of theologians of different Christian denominations, including Rowan Williams, now Archbishop of Canterbury, Kallistos Ware, Bishop of Diokleia and Lecturer in Eastern Orthodox Studies at Oxford University and Cardinal Cahal Daly Archbishop Emeritus of Armagh, Primate Emeritus of All Ireland. This was weighty enough to demand a response and the final report included an appendix entitled “The moral status of the early embryo: reading the Christian tradition” (Harries 2002, App. 4).

Thus many Christians and other religious believers have taken an active part in these debates from the 1980s to the present. However, there has been no unanimity among believers in regard to the ethical and legal conclusions they have reached, nor has there even been agreement on the proper starting points: the theological and moral principles that are most relevant to the issue.

Two accounts of the Christian tradition

The remainder of this paper is concerned with one particular area of dispute among Christians with regard to the moral status of the human embryo, and this relates to the interpretation of the Christian tradition. Cyprian of Carthage famously remarked that “for custom without truth is the antiquity of error”(Cyprian 1980 edition, Letter 73.9). Nevertheless, even in human terms, the existence of clear precedent from the tradition lends weight to an argument and the lack of precedent weakens it. In law, morality or politics, the more novel a position appears, the more its defenders are keen to find some element of the accepted legal, moral or political tradition that seems to support it. Furthermore, for Christians, tradition represents the way that generations of followers of Christ since the apostles, have attempted to understand and to live out the Word of God. Thus, while Christian tradition must always be measured by its conformity to Sacred Scripture, many Christians in the Reformed tradition hold that common Christian tradition is a useful spiritual guide not to be set aside easily.

Tradition is given even greater authority within the Catholic and Orthodox Churches. For example, Augustine of Hippo regarded at least some elements of the Christian tradition as having apostolic authority: “as to those other things which we hold on the authority, not of Scripture, but of tradition, and which are observed throughout the whole world, it may be understood that they are held as approved and instituted either by the apostles themselves, or by plenary Councils, whose authority in the Church is most useful” (Augustine 1980 edition, Letter 54.1). Notice that the source of authority here is not only that of the apostles themselves but also that apostolic authority that can still be exercised by the Church as a whole, for example through a plenary council. From a Catholic perspective, and indeed from an Orthodox

perspective, Christian Tradition in its full sense, when properly understood, is an authoritative guide to matters of faith and morals. Nevertheless, it is also true to say that the greater the weight given to Tradition, the more carefully distinctions have to be made as to what constitutes true and unchangeable Tradition and what constitutes the changeable expression of that tradition (Athanasiev 1967; John Paul II 1995b, paragraph 19).

With respect to the moral status of the human embryo two starkly different claims have been made concerning the content of the Christian tradition. In 1995, in a letter to the whole Church on the *Gospel of Life (Evangelium Vitae)*, Pope John Paul II asserted that “the Church has always taught and continues to teach that the result of human procreation, from the first moment of its existence, must be guaranteed that unconditional respect which is morally due to the human being.” (John Paul II 1995a, paragraph 60). According to the Pope, this unconditional respect has been a constant feature of Christian history. “Throughout Christianity’s two thousand year history, the same doctrine has been constantly taught by the Fathers of the Church and by her Pastors and Doctors.” (John Paul II 1995a, paragraph 61). Similar statements may be found in the *Catechism* and in other official documents of the Roman Catholic Church.

In contrast, in a speech in the House of Lords in January 2001, the Anglican Bishop of Oxford claimed that, far from representing two thousand years of history, the present teaching of the Catholic Church had been established less than two hundred years ago. “I should like to suggest that it was only in the 19th century that the position became firmed up. Earlier Christian thought on this subject indicates an awareness of a developing reality, with developing rights as we would put it.” In opposition to the claims of the Pope and of others, the Bishop asserted that there was “an alternative western tradition”. This alternative tradition was said to give the embryo a non-absolute status which would be compatible with using human embryos in experiments. “If we take a developmental view of the human person, as I believe the western tradition did until the nineteenth century, the early embryo has a special, though not an absolute, status.” (Hansard 2001, Vol.621, 22 January 2001, col. 35-37). The Bishop drew his arguments from the work of the Anglican theologian Gordon Dunstan. In an influential paper on the status of the embryo in the Western moral tradition Dunstan argued that:

The claim to absolute protection for the human embryo ‘from the beginning’ is a novelty in the western, Christian and specifically Roman Catholic moral traditions. It is virtually a creation of the later nineteenth century...
(Dunstan 1988, 40)

This dispute over the actual content of the Christian tradition was not, of course, the only issue in the embryo experiment debate, but it did figure in articles and books published since the 1980s, in speeches made in the House of Lords, and in submissions made to the *Select Committee on Stem Cell Research* in 2001. In examining the specifically religious aspects of the debate, it is thus difficult to ignore this question: What are the relative merits of the case made by Pope John Paul II and others (on one side) and by GR Dunstan and others (on the other) regarding the status of the embryo within the Christian tradition? Has the human embryo been granted a sacred (or absolute) status, or has the human embryo been granted only a special (or non-absolute) status?

The absolute wrongness of abortion

In favour of Pope John Paul's reading of the Christian tradition is the fact that Christianity was notable from the outset for its wholehearted opposition to abortion. The earliest Christian writings on the issue declared simply, "you shall not murder a child by abortion nor kill it after it is born" (Didache 2003 edition, 2.2; Epistle of Barnabas 2003 edition, 19.5). This text not only characterises abortion as a sin, but characterises it as "murder" (*phoneuseis*), that is, as the deliberate and unjustified killing of a human being (cf. Matthew 19.18, Mark 10.19). Furthermore, the unborn human being is not described as an embryo or a foetus but as "a child" (*teknon*), and abortion is linked with, and hence likened to, infanticide. In the context of the ancient world the claim that abortion was morally equivalent to infanticide would not have been controversial. Both practices were by and large accepted by pagans, though with some speaking out against one or the other, and both practices were rejected by Christians, though there were Christians who failed to practice what they preached (See Bonner 1985; Carrick 2001; Connery 1977; Gorman 1982). Thus John Chrysostom found it necessary to confront the men in his congregation, both single and married, for going to prostitutes. For by doing so they were guilty not only of adultery but also, if the woman became pregnant and then procured an abortion, "[you] makest her a murderess also." (Chrysostom 1980 edition, Homily 24).

The most common criticism of abortion from Christians in the ancient world was thus that abortion involved homicideⁱⁱⁱ. In the first four centuries there is no dissent from this view that abortion amounted to the killing of an unborn child and was wrong for that reason. At the beginning of the fourth century when the Church began to formulate a discipline in terms of Church law, abortion was subject to strong penalties. The synod of Elvira held in Spain in 305 CE decreed that abortion subsequent to adultery should be punished by exclusion from communion until death.

If a woman becomes pregnant by committing adultery while her husband is absent, and after the act she destroys the child, it is proper to keep her from communion until death, because she has doubled her crime.
(Elvira, Canon 63)

This penalty is very harsh, but it should be noted that, by providing this period of exclusion the Church was, in a certain sense, giving a route back to final reconciliation. The punishment was intended as exemplary and as medicinal but the Church did not utterly abandon the sinner. This is clearer at the Synod of Ancyra of 314, a local gathering held in the calmer days after the edict of toleration of Christians issued by Constantine in 313.

Concerning women who commit fornication, and destroy that which they have conceived, or who are employed in making drugs for abortion, a former decree excluded them until the hour of death, and to this some have assented. Nevertheless, being desirous to use somewhat greater leniency, we have ordained that they fulfil ten years of penance.
(Ancyra 1980 edition, Canon 21)

Here a desire is expressed for greater leniency towards the sinner and her exclusion from communion is limited to ten years. The penalty is still severe, but there is also an acknowledgement of the need to be a community of reconciliation. Towards the end of the fourth century Basil the Great set down a collection of canons that were to become the basis of Eastern canon law. Canon eight distinguishes forms of accidental homicide that are not murderous from forms of homicide that are murderous. In this context those who take medicines to procure abortion are held to commit murder.

He that kills another with a sword, or hurls an axe at his own wife and kills her, is guilty of wilful murder; not he who throws a stone at a dog, and undesignedly kills a man, or who corrects one with a rod, or scourge, in order to reform him, or who kills a man in his own defence, when he only designed to hurt him. But the man, or woman, is a murderer that gives a philtre, if the man that takes it die upon it; so are they who take medicines to procure abortion...

(Basil 1980 edition, Canon 8)

In a commentary on the canons Basil makes clear that those “who administer drugs to cause abortion, as well as those who take poisons to destroy unborn children” commit murder (Basil 1980 edition, Letter 188.8). This canon contains no reference to adultery or to other circumstances and gives no specific penalty; essentially its aim is to establish the legal principle that abortion is murder. An earlier canon prescribes the penalty for abortion: ten years exclusion from communion.

Let her that procures abortion undergo ten years’ penance, whether the embryo were perfectly formed, or not.

(Basil 1980 edition, Canon 2)

The period of penance is the same as that given by the Synod of Ancyra and Basil may well have been following established custom. The canon explicitly applies to early ‘unformed’ embryos as to late ‘formed’ embryos. There is no moral or legal distinction made between early and late abortion. However, while Basil seems to regard abortion at any stage as murder, the penalty is less than the standard canonical punishment for murder (twenty years penance, canon 56). The explanation for this difference seems to lie with the appropriateness of more leniency when it comes to abortion, notwithstanding the fact that abortion at any stage of pregnancy is homicide. This is expressed rather obliquely by Basil by saying that it is the character of the repentance that matters rather than the length of time.

The woman who purposely destroys her unborn child is guilty of murder. With us there is no nice enquiry as to its being formed or unformed. In this case it is not only the being about to be born who is vindicated, but the woman in her attack upon herself; because in most cases women who make such attempts die. The destruction of the embryo is an additional crime, a second murder, at all events if we regard it as done with intent. The punishment, however, of these women should not be for life, but for the term of ten years. And let their treatment depend not on mere lapse of time, but on the character of their repentance.

(Basil 1980 edition, Letter 188.2)

Basil’s canons exercised a great influence on the development of Eastern and Western canon law in the first millennium. Between the fourth to the ninth century in both East and West, the Church enacted laws against abortion which did not make any distinction in the seriousness of abortion according to the stage of pregnancy^{iv}. In 847 Pope Stephen V wrote to the bishop of Mainz a line that was destined to be included in medieval collections of canon law:

If he who destroys what is conceived in the womb by abortion is a murderer,
how much more is he unable to excuse himself of murder who kills a child even one day old.

(Epistle to Archbishop of Mainz)

Throughout the middle ages and the early modern period abortion at any stage of pregnancy continued to be condemned as a serious sin. In 1588 Pope Sixtus V imposed the special penalty of automatic (*latae sententiae*) excommunication for procuring abortion and this was reiterated both in the Code of Canon Law of 1917 and in the revised Code of 1983, though with slightly different conditions. In 1679 Pope Innocent XI condemned various ‘laxist’ errors, including

the view that a threat to a girl's reputation which might put her life in danger could somehow justify very early abortion: Such an external threat could not justify a direct attack on the embryo, however young (Decree of the Holy Office 4th March 1679, n. 34).

In the nineteenth and twentieth centuries there have been a succession of condemnations of abortion from Pius IX (1869)^v and Pius XII (1944)^{vi} to the Second Vatican Council (1965)^{vii}. Nevertheless, the characterising of abortion as a grave sin against the unborn child is not special to the Roman Church in the nineteenth and twentieth centuries. It is the common teaching of the fathers of the Eastern and Western Church in the first millennium. This teaching was not rejected by the Protestant Reformers, but rather they promoted the duty to respect and protect the unborn child with a new zeal. It was only in the late-twentieth century that there was any significant Christian movement – in any tradition – that was open to abortion for social or personal reasons. Given the continuity of the teaching from the Didache and Basil the Great, to Pope Stephen V, to Pope John Paul II it seems no exaggeration to say that “throughout Christianity's two thousand year history, the same doctrine has been constantly taught by the Fathers of the Church and by her Pastors and Doctors.” (John Paul II 1995a, paragraph 61).

Qualifications and apparent exceptions

Given this extraordinary continuity of Christian opposition to abortion, evident from the first to the twentieth century, how can Dunstan, Harries and others argue that the Christian tradition accorded the embryo only a non-absolute, relative or ‘special’ status? Those who argue for this position point to three elements in the Christian tradition that seem to qualify the absolute prohibition on abortion. These are:

1. the existence of variable penalties for abortion according to the age of the embryo;
2. the prevalent medieval belief that the human embryo did not have a spiritual soul from conception but that it acquired one at a later stage of development;
3. the casuistic debate concerning abortion to save the mother's life.

Variable penalties

The variation of penalties for abortion according to the age of the embryo is not present in the Hebrew Scriptures, but it is seen in a very influential Greek translation of the Scriptures, compiled in the third century BCE and known to us as the Septuagint (LXX). The particular passage to be examined occurs in the book of Exodus immediately after the giving of the Ten Commandments. It is useful to quote from Robert Young's translation of 1862 as this gives a more literal reading of the Hebrew than some more recent translations.

And when men strive, and have smitten a pregnant woman, and her children have come out, and there is no mischief, he is certainly fined, as the husband of the woman doth lay upon him, and he hath given through the judges; and if there is mischief, then thou hast given life for life, eye for eye...

(Exodus 21:22-24, *Young's Literal Translation*)

The Septuagint version of the passage reads as follows.

And when men strive, and have smitten a pregnant woman, and her infant has come out *not fully formed*, he is certainly fined, as the husband of the woman doth lay upon him, he shall give with what is fitting; but if it is *fully formed*, then he shall give life for life, eye for eye...

(Exodus 21:22-24, LXX emphasis added)

This legislation does not refer to procured abortion but to assault on a pregnant woman. Nevertheless, inasmuch as the intention of the law was to protect the unborn child (as well as the mother) it has clear relevance to abortion. In the Septuagint version the penalty varies according to the stage of development of the embryo. It seems that the death of the fully formed embryo merits capital punishment “life for life” whereas the death of the embryo that is not fully formed merits only a fine. Basil explicitly rejected the legal or moral relevance of this distinction “with us there is no nice enquiry as to its being formed or unformed” (Basil 1980 edition, Letter 188.2) and Jerome’s translation of the Scriptures into Latin, the Vulgate, followed the Hebrew in this case, and did not make any reference to whether the infant was formed or unformed. However, Augustine used an old Latin translation of the Scriptures, based on the Septuagint and in his commentaries made reference to this distinction of formed and unformed (*Questions on Exodus* 80). He regarded the passage as implying that the killing of an unformed embryo was not homicide in the full sense, and this was why it attracted a lesser penalty.

While the early canonical tradition rejected the gradation of penance for abortion according to the stage of development of the embryo, this scheme was taken up in some of the books of penance produced in (Celtic) Ireland and (Anglo-Saxon) Britain between the seventh and ninth centuries CE. These ‘penitentials’ were shaped in part by the strong monastic influence prevalent in Celtic and Anglo-Saxon Christianity. Penances tended to be more arduous than the older canonical penances, including prolonged periods of fasting and abstinence and not only exclusion from communion, but they also tended to be shorter. For example the Penitential of Theodore, Archbishop of Canterbury gave one year penance for abortion if the embryo was less than forty days old, and three years penance if the embryo was older than this. The standard tariff for murder was three years penance.

A later tradition represented by the Old Irish Penitential (early ninth century) gave three and a half years penance for abortion after the pregnancy had become established, but seven years if the flesh had formed and fourteen years if the soul had entered. This strand of tradition thus reflected not a two stage but a three stage process. A threefold pattern is not found in Aristotle or the Septuagint, but something like it can be found in Hippocrates and there are also parallels in the Talmud and in the Qur’an. It may simply reflect the distinction between formation (when the limbs and organs were complete) and quickening (when the movement of the child was first felt by the mother).

The canon law of the medieval West looked not to the penitentials but to collections of early canons and to the fathers of the church. Opinions were taken from the letters, sermons and treatises of authoritative writers. Augustine and other sources, based on the Septuagint held that abortion before formation was not homicide in the full sense and this view was therefore taken up in medieval canon law. On the other hand, for some purposes, both early abortion and taking poisons of sterility were treated as homicide (Gregory IX *Decretals* 5.12 canon 5). A legal distinction between early and later abortion was made in regard to the technical question of irregularity, but not in regard to penance. If someone caused the death of a human being, whether maliciously or negligently, that person was barred from becoming a cleric. This was held to apply to abortion but, in 1211, Innocent III declared that this irregularity only applied if the embryo was animated (Gregory IX *Decretals* 5.12 canon 20). The distinction between animated and unanimated seems to have been identified with the earlier (LXX) distinction between fully formed and not fully formed. In the middle ages the common opinion, following

Aristotle, was that this stage was reached forty days after conception in the case of males and ninety days after conception in the case of females (Aristotle *History of animals* 7.3 583b 3-5, 15-23). The distinction gained greater prominence in Western canon law in 1591 when Pope Gregory XIV restricted the excommunication promulgated by Sixtus to cases where the embryo was animated.

This law remained in force until 1869 when the excommunication for abortion was promulgated by Pius IX without this distinction. It is this last date that Dunstan has in mind when he says that “the claim to absolute protection for the human embryo ‘from the beginning’ is... virtually a creation of the later nineteenth century” (Dunstan 1988, 40), and that Harries refers to when he says “I should like to suggest that it was only in the 19th century that the position became firmed up” (Hansard 2001, Vol.621, 22 January 2001, col. 36).

Ensoulment

Closely related to the question of variable ecclesiastical penalties for abortion was the question of when the embryo acquired a spiritual soul. It seems that the first Christian writings to consider this question asserted that the spiritual soul was present from conception. In the words of Tertullian in the second century of the Christian era “Now we allow that life begins with conception, because we contend that the soul also begins from conception; life taking its commencement at the same moment and place that the soul does” (Tertullian *Treatise On the Soul* 1980 edition, 27). A similar view is presented by Clement of Alexandria quoting an earlier Christian teacher:

An ancient said that the embryo is a living thing; for that the soul entering into the womb after it has been by cleansing prepared for conception, and introduced by one of the angels who preside over generation, and who knows the time for conception, moves the woman to intercourse; and that, on the seed being deposited, the spirit, which is in the seed, is, so to speak, appropriated, and is thus assumed into conjunction in the process of formation. He cited as a proof to all, how, when the angels give glad tidings to the barren, they introduce souls before conception. And in the Gospel “the babe leapt” as a living thing. And the barren are barren for this reason, that the soul, which unites for the deposit of the seed, is not introduced so as to secure conception and generation.

(Clement *Excerpts of Theodotus* 1980 edition, 50)

The opinion that the soul was present from conception was also defended by Gregory of Nyssa (*On the Making of Man* 29) and Maximus the Confessor (*Ambigua* 2, 42). Maximus took his argument from the example of Christ. Christian dogma expressed in the great ecumenical councils of the Church asserts that Christ was fully God and fully human from the first moment of his conception, but this implies that Christ had a spiritual soul from the first moment of conception. If this is true, and Christ was like us in all things but sin, then it must be true that all human beings receive a spiritual soul at conception^{viii}.

Nevertheless, while there was a strong strand of early Christian thought which regarded the soul as present in the embryo from the moment of conception, this view was increasingly eclipsed, especially in the West, by an account which placed ensoulment sometime later than conception. To some people, the idea of late ensoulment was implied by the LXX version of law on assaulting a pregnant woman already mentioned. This is shown vividly in an anonymous work from the fifth century which for many years was ascribed to Augustine of Hippo.

Moses handed down that if someone strikes a pregnant woman and causes a miscarriage, if it is formed he should give life for life, but if it is unformed he should be punished with a fine, thus proving that there is no soul before form.

(*Questions on the Old and New Testament* 23)

Augustine's own view of this matter was subtle as he never gave up the belief that the soul might be generated by the parents, and therefore be present from conception. In addition to the direct and indirect influence of the Septuagint, a second major reason for the rise of the idea of late ensoulment was the increasing influence of the philosophy of Aristotle. The philosophy of Aristotle was informed by empirical investigation, especially in the area of biology. Aristotle wrote a systematic treatise on generation and embryology which considered not only human embryos but a variety of other animals including birds, reptiles and fish. In each case he regarded the process of embryological development as the gradual imparting of form by the (male) parent to the matter provided by the female.

"The male provides the 'form' and the 'principle of movement', the female provides the body, in other words, the material"

(Aristotle *Generation of Animals* 1953 edition, 1.20, 728a 10-11).

By soul, Aristotle meant the principle of life. Thus all animals and plants possessed soul, but there were different sorts of soul – vegetative, sensitive, locomotive, intellectual. In general, soul is imparted to the body in stages as each part is formed and the specific soul is not actually present until the form is complete (though it is present potentially).

It is while they develop that they acquire a sentient soul. I say "while they develop" for it is not the fact that when an animal is formed at the same moment a human being, or a horse, or any other particular sort of animal is formed, because the end or completion is formed last of all, and that which is peculiar to each thing is at the end of its process of formation.

(Aristotle *Generation of Animal* 1953 edition, 2.3, 736b 1-5)

Christians combined Aristotle's ideas of gradual formation with the Jewish idea of God breathing in the soul. The philosophy of Aristotle had relatively little influence on the early Church but began to gain in influence towards the end of the patristic period. From the seventh century onwards it was primarily Islamic scholars who took up the ideas of Aristotle, translating many of his works into Arabic. Finally, in the thirteenth century of the Christian era, when the medieval universities were being established and were thirsty for new knowledge, these lost Aristotelian texts were translated from Arabic into Latin, together with the commentaries of scholars such as Ibn Rushd and Ibn Sina (who became known by the Latinised names Averroes and Avicenna). The acceptance of Aristotelian philosophy into Western Christianity was neither smooth nor without resistance, but it was made easier by the fact that Islamic scholars such as Ibn Sina had already struggled to reconcile Aristotle's philosophy to a monotheistic worldview.

Of the Christian Aristotelians of the thirteenth century none is more renowned than Thomas Aquinas, and it is not surprising that he should be cited as a leading proponent of the theory of delayed ensoulment. According to Thomas the body was formed gradually through the power transmitted by the male seed but the spiritual soul was directly created by God when the body was ready to receive it. Thus the embryo was believed to live at first the life of a plant, then the life of a simple animal, and only after all its organs, including the brain, had been formed, was it given, by the direct and creative act of God, an immortal spiritual soul. This soul became at once the principle of the intellectual, sensitive and vegetative life of the human being,

superseding and replacing the earlier embryonic forms. However, Thomas was not definite about the timing of this transition: he mentions both Aristotle's figure of forty days in the case of males, ninety days in the case of females and Augustine's figure of forty-six days (*Commentary on the Sentences* III, d 3, q. 5, art. 2).

It is in this way that through many generations and corruptions we arrive at the ultimate substantial form, both in man and other animals... We conclude therefore that the intellectual soul is created by God *at the end* of human generation, and this soul is at the same time sensitive and nutritive, the pre-existing forms being corrupted.

(Thomas Aquinas *Summa Theologica* 2000 edition, Ia Q.118 art 2 ad 2 emphasis added)^{ix}

This view is remarkably similar to that of the Islamic account and both in turn seem to be influenced ultimately by a fusion of Aristotelian and Jewish ideas that is, arguably, already present in the Septuagint. It should not be thought that the account given by Thomas Aquinas was unusual in the middle ages. Rather, the belief that the body was formed gradually and that a spiritual soul was given by God at the end of this process seems to have been the norm in the Christian West in the middle ages.

This belief came to be questioned widely with the gradual eclipse of the medieval worldview, first with the assault on the authority of Aristotle in the renaissance and then with a new willingness to subject accepted views to criticism and to return to Scriptural and patristic sources during the Reformation: Both Calvin (Sermons on Job, 12) and Luther (*Disputation of Peter Herzog 'de homine'*) seem to have held that the soul is present at conception^x. In the Catholic tradition delayed ensoulment began to be questioned in the seventeenth century with progress in biology. It was most significantly the discovery of the human sperm and ovum, and the characterisation of human development as a smooth and uninterrupted process from fertilisation that undermined the idea that quickening or being "fully formed" represented a transition from pre-human to human. This emphasis on the significance of fertilisation has been especially marked since the nineteenth century, since when most Catholic theologians have returned to the view that the soul is present from conception.

Abortion to save the mother's life

The practice of casuistry now has a bad name. The Oxford English Dictionary states that the word is "often... applied to a quibbling or evasive way of dealing with difficult cases of duty", making it a synonym for "sophistry". Nevertheless, in its origins casuistry concerns the application of general rules or norms to particular cases in which sensitivity to the particular circumstances was essential. A number of contemporary authors have argued that, though casuistry has fallen out of favour due to abuses in the past, it remains a valid and important element in moral reasoning. For example, Jonsen and Toulmin define casuistry as follows:

The analysis of moral issues, using procedures of reasoning based on paradigms and analogies, leading to the formulation of expert opinion about the existence and stringency of particular moral obligations, framed in terms of rules and maxims that are general but not universal or invariable, since they hold good with certainty only in the typical conditions of the agent and circumstances of the case.

(Jonsen and Toulmin 1988, 257 quoted in Reich 1995, volume I, 348)

Jonsen emphasises that, unlike modern "situationism", casuistry in its classical form acknowledged the binding character of ethical principles. The concern of casuistry was to assess the relevance, applicability and limits of various principles to the particular case in hand.

It was particularly concerned with borderline cases and thus, “while [casuistry] may lead you to stretch a point on the circumference, it will not permit you to destroy the centre” (Anscombe 1981b, 36). The centre is not defined by, but is presupposed by, casuistry. The centre (the wrongfulness of murder, theft, adultery etc.) is defined by divine law and virtue, by the nature of human beings and their highest good, which is God. In contrast, the circumference is constituted by uncertain cases where it is not clear how to understand or categorise a particular act.

The tradition of casuistry was typically (though not universally) viewed with disdain by Orthodox or Reformed Christians, but it flourished within the Catholic tradition, especially in the medieval and early modern period. Casuistry dealt not with cases regarded as straightforward, such as the wrongness of abortion for personal or social reasons, but with difficult cases. The difficult case *par excellence* in this area was when the pregnancy itself posed a danger to the mother’s health, or where giving an expectant mother medical treatment might cause a miscarriage.

In the first millennium of the Church’s history there is no discussion of this question. Tertullian alludes to the practice of abortion to save the life of the mother but it is not clear whether or not he approves of it. The case of abortion to save a mother’s life is only taken up directly in the middle ages. One of the first to discuss the case was Antoninus of Florence (1389-1459)^{xi}. He declared that it was neither legitimate to kill the woman to save the child (by Caesarean section) nor to kill the infant to save the woman (by abortion). If the only way to save someone is by killing someone else, it is better to do nothing. However, having said this, he made one qualification. Citing fellow Dominican John of Naples, he argued that, before the soul was infused into the embryo it was legitimate to abort the embryo to save the mother’s life as this was not homicide strictly speaking. On the other hand, the killing of the unformed embryo, to prevent a child from coming to be, was very close to homicide, therefore it could only be justified to save the mother’s life and not for any lesser reason. Furthermore, if it were doubtful whether or not the embryo possessed a human soul then it was certainly not to be harmed.

Early in the fifteen century a Franciscan theologian called Antonius of Cordoba (1485-1578) proposed a different distinction into the casuistry of medical abortion. He saw no ethical distinction between killing an embryo before or after ensoulment. Both acts were forms of homicide. However, he saw an important difference between treatments which directly aimed at causing the death of the unborn infant (*de se mortifera*) and medicines that were directly intended to help the woman but which had a possible side effect of causing an abortion (*de se salutifera*). The former included taking poison, cutting up the embryo in the womb or hitting the woman to cause a miscarriage. These were forbidden. The latter included treatments such as bleeding, baths and purgatives. These were legitimate. A woman had a duty to care for her child but she had a prior right (*ius potius*) to look after her own health. Peter of Navarre (d. 1594) accepted this new distinction and gave the analogy of a pregnant woman fleeing from a wild bull. It was legitimate for her to run and leap to escape, even if this caused a miscarriage. The miscarriage is not her aim here, or even the means to an end, but is a tragic side-effect. It is this distinction that is invoked by John de Lugo in a passage quoted by Gordon Dunstan.

If the medicine has use for the life of the mother but as an unintended consequence causes her to miscarry, then, so be that the fetus is not animated, the use is licit.
(de Lugo cited by Dunstan 1988, 51)^{xii}

This passage refers to abortion before ensoulment, but the same author later pointed out that, if this is accepted, then by the same logic indirect abortion is licit to save the life of the mother, even when the child is ensouled (*De justitia* disp. X, Sect IV n. 133.). In 1679 the Holy Office condemned the view that it would be permissible “to procure abortion before the ensoulment of the foetus lest the girl known to be pregnant be killed or disgraced” (Decree of the Holy Office 4th March 1679, n. 34). In this case the reasons for the abortion are external and unrelated to medical treatment. It is not an indirect effect of medical treatment but a directly intended effect. Following this pronouncement most Catholic moralists held that it was always wrong to directly intend the destruction of the embryo whether or not ensoulment had occurred.

From the fifteenth to the nineteenth century, some Catholic theologians continued to hold that the soul was infused at around 40 days for males and 90 days for females. However, the alternative view, that the soul was given at conception, gradually gained adherents and by the mid eighteenth century was admitted to be a probable opinion, if not a proven one. From this time moralists started to argue that, for practical purposes, the embryo should be assumed to be ensouled from conception. Nevertheless, in fact the issue of ensoulment had little effect on the argument over medical abortion, for here it was the distinction of direct and indirect which did the work and not the distinction between ensouled and unensouled. Alphonsus Liguori is representative of the tradition in arguing that direct abortion is always wrong, whether the spiritual soul had been infused or not, whereas indirect abortion is licit if the mother’s life is threatened, again irrespective of whether or not the soul has been infused.

Resolving the argument

To summarise, Pope John Paul II is correct to say that, up until the 1960s, all branches of the Church, Orthodox, Catholic and Protestant, viewed direct, non-medical abortion as a serious sin. This was so irrespective of the stage of development of the embryo. The present Catholic teaching also seems to reflect the earliest strand in the Christian tradition in placing ensoulment at conception and in characterising abortion as homicide.

On the other hand Dunstan is right to point out that, at least in the Western or Latin Church, at least in the middle ages, both theology and law drew a distinction between the early unformed embryo and the later formed foetus and held that destroying an early embryo was not literally homicide, and that, at least for some writers, it was not as serious as homicide.

The Pope, and others who wish to emphasise the status given to the embryo tend to gloss over questions of ensoulment, or else say that, if there is a doubt about ensoulment, then the embryo should be given the benefit of the doubt. They also tend to play down the fact that, at least for some periods of history, the Church has applied different penalties to the destruction of the unformed embryo and the destruction of the formed foetus.

Dunstan, and others who wish to relativise the status given to the embryo tend to neglect the witness of the Church in the first three centuries, the canon law of the East, and developments since the seventeenth century and focus on the law and theology of Christians in the Latin West in the middle ages.

Given the well known stance of the Catholic Church on the status of the human embryo, someone who came to the contemporary debate without any knowledge of the Christian tradition might assume that the Catholic Church had always taught that the soul was present from conception. This misunderstanding might be reinforced by statements by Pope John Paul

II which could give the false impression that the Church had always condemned abortion as homicide. Writers such as Dunstan and others make a reasonable point when they draw attention to the significant strand of tradition that places ensoulment later than conception (generally at about 40 days) and say that this had an effect both on law and on difficult moral cases.

Could it be said, then, that Pope John Paul II is simply emphasising the early and later tradition and the East, while Dunstan is emphasising the Western middle ages? In other words, could it be said that these are two halves of the story each of which have some truth in them? This would be true *except* for the practical conclusions that Dunstan seeks to draw from his analysis.

Ethical non-sequiturs

Where Dunstan distorts the tradition is in his general conclusion:

The tradition attempted to grade the protection accorded to the nascent human being according to the stages of development. The tradition is challenged today by those who claim absolute protection ‘from the moment of conception’ and so would forbid... any use of ova fertilised in vitro not directed towards their being implanted and brought to term in live birth.
(Dunstan 1980, 55-56)

In the first place, the belief that ensoulment took place at a stage of development some few weeks after conception is neither the earliest Christian tradition, nor the dominant tradition of the East nor the dominant tradition since the rise of modern biology. For this reason it cannot claim to be “the tradition”. In the second place the strand of tradition supporting late ensoulment relied heavily on the influence of ancient Greek biology prior to the discovery of sperm and ovum and prior to knowledge of modern genetics. The biology of reproduction and embryogenesis put forward by Aristotle is no longer tenable, and therefore neither is that part of the Christian tradition that depended upon Aristotelian biology. In the third place, and perhaps most importantly, with respect to that part of the tradition which did place ensoulment late, it is a grave distortion to imply that writers such as Thomas Aquinas and Alphonsus Liguori would have sanctioned the deliberate and direct destruction of the embryo. This flies in the face of their actual opinions as stated explicitly in many places.

For example, Thomas Aquinas held that the sin of preventing a child from coming to be was second after homicide: “after the sin of homicide, whereby a human nature already in existence is destroyed, this type of sin appears to take the next place” (Thomas Aquinas *Summa Contra Gentiles* 1956 edition, III, 122). Again, Alphonsus Liguori explicitly held that killing an embryo before ensoulment was “anticipated homicide”:

It is *never lawful* directly to procure an abortion, even though the foetus may be supposed to be still inanimate...if it is not yet animate, it is nevertheless alive (*vivus*), and is unjustly prevented from becoming a man, and is thus, so to speak (*velut*) anticipated homicide.
(*Theologia Moralis* III.5, C. 4, art. 2 cited by Dunstan 1988, 52, my emphasis)

If killing a human embryo is, “so to speak, anticipated homicide”, or is a sin second after homicide (as Thomas Aquinas asserted) or is morally equivalent of homicide (as Raymond of Pennaforte and Bonaventure asserted), and if a direct attack on the embryo is “never lawful”, how can we talk of “graded protection”? Christians did not grade the protection given to the embryo but, rather, graded the penalties and penances imposed for different sins.

The fundamental flaw in Dunstan's argument lies in its attempt to move from varying legal penalties to ethical judgements about the status of the embryo. In general, it is a fallacy to think that, where one offence is punished less severely than another, then this act is only "relatively" offensive so that it may be ethically justified by the right circumstances. It is as if the heavier punishment applied to murder were thought to suggest that sexual assault or racially aggravated assault were only "relatively" criminal and might even be recommended if they were of potential human benefit to others! In this context comparisons are odious. If murder receives a heavier sentence than rape, this does not mean that rape is only "relatively" and not "absolutely" bad. Crimes can be absolutely wrong even though they receive graded punishments.

Finally, it is useful in this context to consider the comments of the first century Jewish philosopher Philo. He says that the man who causes a woman to miscarry before the child is fully formed should be punished, not only because of the assault upon the woman, but also for "obstructing the artist Nature in her creative work of bringing into life the fairest of living creature, man" (Philo *On Special Laws* 1968 edition, 3.19). The wrong here is not just against the woman but also against Nature, and implicitly against God, who is fashioning that most excellent of all creatures in the womb. While the timing of ensoulment has been disputed, what has not been disputed by Christians is that it is God who is responsible both for forming the embryo and for giving life and soul. This is the clear teaching of many passages in Scripture (for example Psalm 139 quoted earlier). At whatever stage the spiritual soul is given, the embryo is from the beginning the work of God, even if it work in progress. Even if God has not yet given the soul, he is already preparing the embryo to receive it (see Jones 2004, 247-251).

Defensible conclusions

The content of the Christian tradition on the embryo may be stated as a series of propositions:

- (1) There are two strong traditions on ensoulment
 - a. that it occurs at conception
 - b. that it occurs at formation (or possibly 'quickening')
- (2) The killing of an ensouled embryo is homicide in the full sense
- (3) If ensoulment is later than conception, the killing of an embryo before ensoulment is not technically homicide
- (4) If ensoulment is later than conception, the killing of an embryo before ensoulment is, nevertheless, morally close to homicide
- (5) Abortion has sometimes carried different penalties depending on the stage of development of the embryo
- (6) Abortion has sometimes carried the same penalty irrespective of the stage of development of the embryo
- (7) Modern biology has encouraged belief in ensoulment at conception
- (8) If it is not known whether the embryo possesses a soul, the embryo must receive the benefit of the doubt
- (9) Direct abortion at any stage is a serious sin
- (10) Indirect abortion to save the mother's life is licit, but not for lesser reasons

Even if those elements of the tradition emphasised by Dunstan (i.e. (1)b, (3), and (5)) are given full weight, the tradition as a whole cannot be squared with embryo experimentation. If direct destruction of an embryo is never legitimate, even to save the mother's life, even when the embryo is known not to be ensouled, how can the destruction of embryos for "potential human

benefit” be justified? The use of embryos for destructive experimentation would clearly be contrary to the moral tradition (exemplified by (4) and (9)) even if the tradition (1)a could safely be ignored. Furthermore, (7) and (8) imply that the possibility that the embryo possesses a soul at conception cannot safely be ignored.

Several elements of this tradition should be of interest to Islamic scholars. The Qur’an and the Haddith seem to imply that the ensoulment occurs sometime during pregnancy, as was widely believed in the Christian West during the middle ages. The Christian moral tradition attempted to clarify moral principles for dealing with the embryo both after and before ensoulment which were compatible with respect for life and for the creator and which were also sensitive to medical circumstances. In matters of medical casuistry there are therefore arguments and distinctions in the Catholic tradition (as explored in depth in Connery 1977) which might well be of use to contemporary Islamic jurists.

With regard to embryo experimentation, the question with which we started, the Christian moral tradition gives no precedent for any practice that would treat the embryo as disposable, or as a resource to be used for the general public good of the progress of medical science. From the perspective of this tradition, to allow human embryos to be used for scientific research in the process of which they would be destroyed, is to forget who it is that forms us in the womb and who it is that is at work in the embryo, whether or not He has yet given the embryo its soul.

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Notes

ⁱ For details of the politics of this debate, including Christian influences, see Mulkay 1997.

ⁱⁱ “But in fact our Roman Catholic member, John Marshall, a Professor of Neurology, and a most helpful and hardworking committee member, wrote an admirable minority report, setting out his arguments with great lucidity” (Warnock 2001, 487), cf. Warnock 1984.

ⁱⁱⁱ See for example *Apocalypse of Peter* 2.26; Clement of Alexandria *Teacher* II.10.96; Athenagoras *Legatio* 35; Municius Felix *Octavius* 30.2; Tertullian *Apology* 9.4-8; Hippolytus *Refutation of All Heresies* 9.7.6

^{iv} Elvira (305 CE) canons 53, 65; Ancyra (314 CE) canon 21; Lerida (524 CE) canon 2; Braga (527 CE) canon 77; Trullo (692 CE) canon 91; Mainz (847 CE) canon 21).

^v Pius IX tightened the canon law on abortion in 1869: Constitution *Apostolicae Sedis* of Pius IX (Acta Pii IX, V, 55-72; AAS 5 [1869], pp. 305-331).

^{vi} For example: “As long as a man is not guilty, his life is untouchable, and therefore any act directly tending to destroy it is illicit, whether such destruction is intended as an end in itself or only as a means to an end, whether it is a question of life in the embryonic stage or in a stage of full development or already in its final stages”, Discourse to the Saint Luke Union of Italian Doctors 12 November 1944 quoted in Sacred Congregation for the Doctrine of the Faith *Declaration on Procured Abortion* 1982 edition, note 15.

^{vii} “Life must be protected with the utmost care from conception: abortion and infanticide are abominable crimes” Pastoral Constitution on the Church in the Modern World 1984 edition, 51.

^{viii} For more on Christian discussion of Christ as an embryo and its relevance to Christian understanding of the embryo see Saward 1993.

^{ix} Dunstan (1988, 47-48) gives other examples from Aquinas to illustrate the same point: *Summa Theologiae* IIaIIae Q. 64 art. 8, and art.1; *Summa Theologiae* Ia Q. 76 art. 1, and art. 3.

^x Williams 1970 gives an interesting insight into the effect of Reformation thought on the theological understanding of the embryo.

^{xi} For the history of the debate on abortion to save the mother’s life see especially Connery 1977.

^{xii} Dunstan attributes this quotation to *Responsa Moralia* 1651, but without any section or page reference.

However, the passage in fact seems to be a translation of a text taken from *Dictionnaire de Theologie Catholique* p. 1543 and quoting de Lugo’s *De iustitia* disp. X, Sect IV.